15

20

25

5

10

- A method of providing a composeable information agents comprising:
  presenting a graphical representation associated with an first information agent in a
  composition accessed by an initial application, said information agent having state and
  having one or more possible external connections;
- presenting one or more graphical representations associated with one or more second information agents in a composition accessed by an application;
  - allowing connection to be made by graphically connecting one or more of said graphical representations associated with one or more second information agents with said graphical representation of said first information agent; and
  - connecting functionality of said one or more second information agesnt with said first information agent.
- 2. The method according to claim 1 wherein said information agent can be relocated to a new environment and will take all of its associated second agents with it.
- 3. The method according to claim 1 wherein said initial application is a web browser and said composition is a web page.
- 4. The method according to claim 1 wherein said initial application is an email client and said composition is an email message.
- 5. The method according to claim 1 wherein said initial application is a desktop provided by an operating system and wherein said second information agents are presented in a different application but may be connected to a first information on a desktop.
- 6. The method according to claim 5 wherein said desktop provided by an operating system is an interface of a platform, said platform selected from the group consisting of: a windows PC, a Macintosh PC, a unix-type operating system, a set-top box, a wireless logic appliance, internet appliance, a personal digital assistant, or any other device connected to a network.
- 7. A logic architecture comprising:
  - a plurality of Envoiis in a parent/child tree structure, each Envoii an object that handles requests for services and having connections to other objects;
  - a standard service request protocol for distributing services; and

15

20

25

30

5

10

- a plurality of generalizable connections for providing communication between Envoiis and between an Envoii and an external entity.
- 8. A logic architecture providing for object portability on a platform comprising: a MetaVoii able to detect movement of portable objects and able to trigger installation of necessary components;
  - one or more PlaceVoiis, each PlaceVoii allowing existence of portable objects within a particular logical environment;
  - one or more skins, attached to a PlaceVoii or a portable object, providing interface, display, connectivity, behavioral, or interactivity functions;
  - one or more portable objects;
  - a standard service request protocol for distributing services; and
  - a plurality of generalizable connections for providing communication between Envoiis and between an Envoii and an external entity.
- 9. A method for providing portable graphical agents comprising: providing a top-level authoritative server for distributing system architecture components; providing a plurality of operating system agents, for a plurality of different operating systems, for communicating with said server and detecting events in their operating systems; and
  - within a particular platform, providing an expandable architecture of services and application agents managed by said operating system agent;
  - wherein said operating system agent detects a request to move a portable graphical agent to a new location and triggers downloading and installation of necessary services and agents.
- 10. The method according to claim 9 such that a user interacting with an agent will experience the agent as an independent object capable of moving among different logic environments.
- 11. A method for generalizing requests for services comprising: at insertion of an object, requesting any necessary services from said object's parent; querying parts available at said parent for said requested services and providing said services back to said object when present;

1 2

LOJAQ Attorney Docket No: 507.000310US

if not present, at said parent, initiating a request by said parent to said parent's parent for said service;

when a parent is encountered with said service, establishing a connection to said object for transmitting said service.

- The method according to claim 11 wherein said querying and said initiating a request are performed recursively until a parent is encountered that has access to said service or until failure.
  - 13. The method according to claim 11 wherein said recursive requesting continues until a top level external server is reached with access to all available services.